

good feedback incorporated during the whole process will result in better product performance and quality."

FarmLinks: Seeing Prototypes In Action

Given the company's goal of listening to more customers and gathering their feedback more often, Toro took a big step a few years ago by partnering with Pursell Technologies at their FarmLinks facility.

FarmLinks is Pursell's spectacular 18-hole championship golf course and research site in Alabama. Originally designed to be a "working laboratory" for testing Pursell's controlled-release fertilizers, the concept was expanded to include several other companies, and Toro plays a major role. Now, the FarmLinks course serves as a proving ground and demonstration site for new Toro maintenance equipment and irrigation systems.

Every year, hundreds of visiting superintendents travel there to enjoy "The Experience at FarmLinks." Part of that event is the unique opportunity to see Toro prototype models up close—often before they're even released to the public—and then to comment on them.

"That was pretty impressive, looking at some of the new stuff," says Elliott about his visit to FarmLinks. "We saw sprinkler heads that you can adjust up and down, and adjust pressure, and equipment that's able to download its hours through satellites...they were testing new things that I hadn't even dreamed about."

In every case, Toro eagerly listens to the reactions and input. Tim Lacy, that same superintendent who was impressed with how Toro listened to his advice years ago, is now on the other side of the business: He currently serves as Toro's on-site customer manager at FarmLinks.

"When you have almost 1,000 superintendents a year looking at the equipment that's under development, you learn a lot about what's important to them," Lacy

says. "Then when that product gets launched, it's going to be very close to what superintendents really want."

Wide Range Of Feedback

"FarmLinks lets us spend quality time with superintendents from all over the country," adds Toro's Redetzke. "They each bring a perspective from their own facility, because they know what the sand and bunkers are like on their course, or what type of grass they have and other issues they're dealing with. They give us that coast-to-coast feedback, all in one spot."

Visiting superintendents frequently get to test-drive the equipment as well, which provides further insight for Toro engineers.

"They'll actually ride on it and kick the tires and whatever else, so it's hands-on experience," continues Redetzke. "It's just a constant hum of feedback in real time, talking about real issues, and it helps us to keep our thumb on the pulse of the industry. That's really important."

Feedback At Every Level

Besides prototypes and brand-new releases, the FarmLinks course features regular Toro equipment going through its daily paces. Again, that's an opportunity for feedback. "We talk to the operators who are actually using the stuff week after week," Redetzke adds, "and sometimes we learn something that changes our thinking."

Another important source of feedback is Toro's network of distributors. In a typical sales process, distributors are trained to discover what a customer's issues are, and encourage productive communication.

"They're actually our first feedback loop after a product hits the market," Redetzke says. "Distributors are



Golf course superintendents talk to Tim Lacy (second from right) about Toro's new ProCore® 648 aerator at FarmLinks

advocates for their customers, which means they're not afraid to tell us about what superintendents think."

Wherever Toro receives feedback—from a visiting superintendent looking at a prototype, or a customer obtaining a new machine, or an operator who's been using a unit for years—it's all part of a valuable, ongoing process to improve our products and serve you better.

"I believe they're listening, and they're reacting," says Superintendent Elliott. "When you look at some of the Toro equipment that's been developed, like the new ProCore 648 aerator, the Workman and the technology in some of the fairway equipment, it's just more thought-out than some of the other stuff on the market." ■

TORO

New Toro® Aeration Equipment

Pulling For Healthier Turfgrass

We all need a little "breathing room" sometimes, whether you're talking about a house, a relationship or field position in a football game.

Golf course superintendents know that turfgrass needs breathing room, too. It's inevitable for soil on golf courses to become compacted, given the constant beating it takes from carts, mowers, sprayers and golfers. But compaction limits the vital flow of oxygen and moisture to the grasses' roots below, so effective aerification is essential. It loosens the soil and creates macro-pores for water infiltration and gas exchange.

"Aeration is critically important," says Ron Duncan, Ph.D., retired University of Georgia agronomist and the developer of Seashore Paspalum. "If you reduce oxygen to Bermudagrass or Bentgrass roots, those roots will die. And if you lose the roots, your fertility program is not as responsive as it needs to be."

"Compaction is an evil thing in grass," agrees Tony Ferguson, Senior Marketing Manager for Cultivation Products at Toro. "It just creates a barrier to growth. So by pulling out a core and relieving some of that compaction, you open up the soil to allow the grass to grow, the moisture to percolate, the gases to exchange. The other part of that is you're increasing the drainage, so you don't get water pooling on the surface."

"That's the bottom line, keeping those macro-pores open and keeping water and oxygen moving through the profile," continues Duncan, now an independent consultant. "If water and oxygen are going down, then the nutrients are going down to where the root system should be. It affects overall performance with how deep-rooted those grasses are."

Another benefit of aeration is that it helps to break up thatch layers that may be forming.

"If that thatch builds up too high, it can cause spongy turf, be a breeding ground for disease and just cause all kinds of problems," adds Ferguson.



The unique design of the Toro® ProCore® 648 aerator prevents the unit from running over freshly aerated turf, making cultivation and cleanup easy

Better Aeration Options

Knowing the importance of aeration, Toro wants to help make it faster, easier, cleaner and more efficient for you. That has led to many exciting innovations and technological advances in Toro aeration equipment.

One example is the revolutionary ProCore® 648 walking aerator that Toro introduced last year. Based on a unique design concept, the ProCore has its wheels placed within its wider coring head. That means the unit's tires don't roll over pulled cores, so grass surfaces stay better-looking and easier to clean up.

The extended coring head of the ProCore measures a big 48" (122 cm) wide. That four-foot swath is 50% to 100% wider than

"It's more maneuverable, it's smoother. I like the way it went uphill. And obviously it's more productive. I think it's terrific!"

— Jim Nicol, CGCS

comparable machines, which means coring operations go much faster.

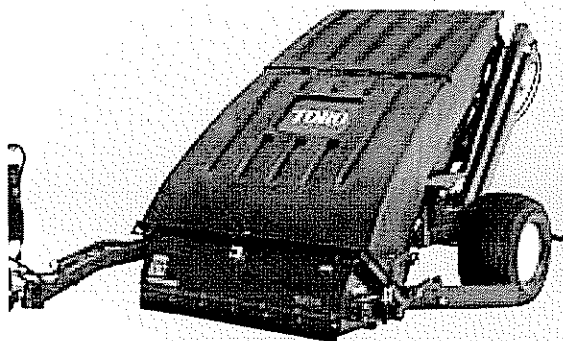
The ProCore delivers consistently clean hole quality up to a full 4-inches (10 cm) deep. The unit is specially built to allow for undulations and contours, so it will pull cores at a constant depth on rolling terrain, without tufting.

"It's a great machine," says Scott Speiden, Director of Grounds at the



Itasca Country Club near Chicago. "It has to be one of the easiest, fastest, quietest, smoothest and cleanest aerators I have ever run, and the quality of the hole is perfect."

The golf course at the Itasca Country Club was originally built in 1925, but good aeration and other turf management keep it fresh.



Toro® Pro Sweep™

"We aerify every inch of this ground every time we can," says Speiden. "It's old, but it looks like a brand new course. I'll come out in the middle of the season just to relieve the pressure on the turf. We've started doing all our approaches with that machine now," he adds, "and our four acres of tees and all the greens. It's beautiful on greens. So, it's getting a workout."

"I like it that the tires don't roll over the cores," agrees Jim Nicol, Golf Course Superintendent at the legendary Hazeltine National Golf Club in Chaska, Minnesota. "I'll be able to do a neater, cleaner job."

Other helpful features on the ProCore include variable hole spacing, hydrostatic drive for better maneuverability, simplified controls and reduced noise.

The variable tine spacing was a big plus for Certified Golf Course Superintendent Mark Langner. He's the Director of Agronomy & Applied Research at FarmLinks, the testing facility in Alabama developed by Pursell Technologies. Toro uses FarmLinks to conduct real-world performance trials

on new equipment, and Langner put the ProCore through its paces.

"It did an excellent job, and that adjustable tine spacing is very important," he says. "When there's not much root mass, it can go wider so you don't tuft the turf. Then during peak times, with good root density down below, that tighter spacing can manipulate much more surface area.



Director of Grounds Scott Speiden, attributes the health and appearance of his spectacular greens at 80-year-old Itasca Country Club to the Toro® ProCore® 648 aerator.

We were able to pull a good core from the tightest spacing at an inch and a half, all the way up to three inches."

Easier, Faster Cleanup

Toro has also unveiled the Pro Sweep™ 5200 turf sweeper, which offers superior core cleanup. A unique new sweeping device that attaches to the Toro Workman® utility vehicle, the Pro Sweep features a floating 52" wide sweeper head that pivots to compensate for rolling surfaces, where it neatly brushes up pulled cores and collects them in a 25-cubic foot hopper. The Pro Sweep is also ideal for collecting leaves, twigs or other organic debris.

"The floating sweeper head follows the ground undulations and changing terrains," says Chris Hannan, Marketing Associate at Toro. "A pivot point on the head lets it tilt to follow the ground so you can collect cores better, whereas a fixed-position sweeper head will leave cores in certain low-lying spots."

The new Pro Sweep also has a pivoting sub-frame, which allows the unit to maintain positive tongue weight when

the sweeper is filling up with cores. That makes it less likely to lose traction on dewy grass or inclines.

The Pro Sweep offers unmatched user convenience, because all of its functions are operated by a single control box on the dashboard of the Workman. With the touch of a button, operators can start the sweeper motion (which is run by the



Workman's high-flow hydraulics) and activate the high-lift dump mechanism without leaving the driver's seat.

Optional attachments include an electric offset arm that enables the operator to automatically switch from transport position to collect position while driving, without having to move it manually.

The ability to clean up after coring is a huge advantage, because in many cases, golfers don't want to deal with pulled cores. A superintendent may see the need for aerifying, but concerns about members' reactions can keep him from doing it.

"That's a communication challenge," adds Dr. Duncan. "We as turf managers have to do better at getting that information to golfers, greens committees and club members as to how important this is, with the understanding that you don't just do it once or twice a year."

"I'm big on aerifying," says Superintendent Speiden. "I'd put a million holes in the green—the more the merrier. And today I'd say nobody in the market has a better aerifier than Toro." ■

TORO.

Toro® NSN®

Always There For You When You Need Help Most

Toro has gone to great lengths to make innovative irrigation products that are user-friendly and simple to operate, but even with the best systems, expert technical support and quick assistance are invaluable resources when the condition of your turf is critical. That's why Toro set the standard for quality customer care with Toro NSN®, or National Support Network, the industry's first comprehensive support network exclusively for its central control customers. Whether you have an operational issue that requires quick remedy, or you need advice on water conservation and time-saving techniques, Toro NSN is always there for you, any time.

You would expect our support technicians to be completely familiar with your Toro irrigation system software and components as well as today's operating systems and applications, and they are indeed experts in their field. But with Toro NSN, you have more—the confidence of working with licensed irrigators, people who see and understand the bigger picture. Real support by real people focused on helping you more confidently use Toro's powerful irrigation technology. And even though most issues can be resolved by a single phone call to NSN, if repair is needed, that same call speeds whatever hardware or software is required to minimize any downtime to keep your turf and reputation impressive in every way, just as you expect it to be.

"I'm not clueless about computers, but when it comes to what the computer can do to operate an irrigation system, I need help," admits Bob Collins, the Certified

Golf Course Superintendent at the private Cripple Creek Golf & Country Club in Dagsboro, Delaware. "For someone like me from a past generation of technology, you can't spend enough time to learn the system inside and out and still run a golf course. Toro NSN has really been important for that, and we

have enough good words to say about Toro NSN. Any time I call them, there is someone there to help me."

Any Question, Any Time

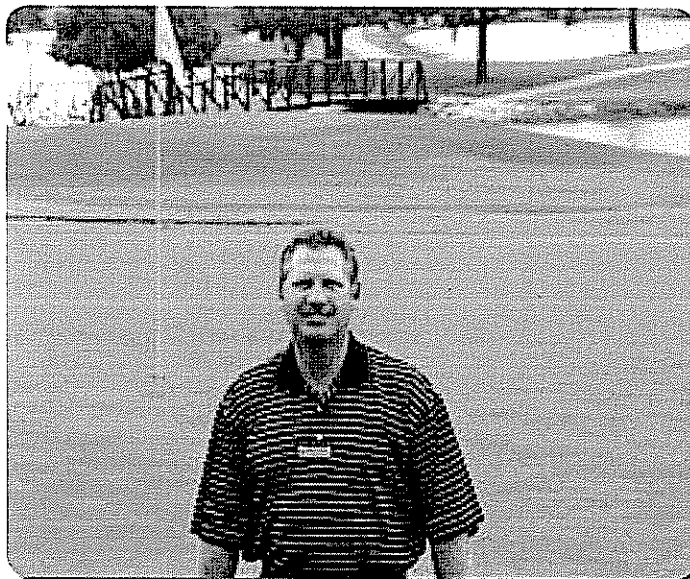
NSN's service is available around the clock, because Toro knows how extremely important it is for turfgrass to have timely irrigation.

"In Texas, in the middle of summer, the irrigation system is critical," says Richard Pavlasek, Director of Golf Course Maintenance at Brookhaven Country Club in Dallas. "If the system shuts down or isn't watering, we're losing grass, and I need help—fast! I can't wait until tomorrow. Having 24-hour technical service is life support for me."

"That 24-hour resource is a big deal," agrees Collins. "If your system goes down, and you're trying to figure things out while your turf gets brown, just saying it's a computer problem won't be

acceptable to my members."

"It's very comforting for me to know that they're just a phone call away," says Walters. "I haven't experienced any big problems with my system, but I'm not



Richard Pavlasek, Director of Golf Course Maintenance at Brookhaven Country Club, appreciates the responsiveness of Toro® NSN®.

have used them quite a bit."

"I'm just not up to speed with all of that yet, and neither was anybody on my staff," says Michael Mongiello, Director of Agronomy at The Estancia Club in Scottsdale, Arizona, referring to an irrigation schedule for his overseeding program. "You really have to be able to fine-tune everything. We were on the phone constantly with NSN and that's what's gotten us up to this point."

"They've been invaluable in getting my system programmed to get my course where I want it to be," agrees Danny Walters, Class A Superintendent of the Mesquite Grove Golf Course at Dyess Air Force Base in Abilene, Texas. "I don't



Bob Collins of Cripple Creek Golf & Country Club in Dagsboro, Delaware relies on Toro® NSN® for troubleshooting his system

the least bit afraid if I do, because I know I'll get immediate response from them to take care of me."

Chances are, you won't be needing to call the NSN in the middle of the night, but if you do, someone will be there to help you. It's like Murphy's Law: if there's a problem, it'll probably come at the most inconvenient time.



The helpful folks at Toro® NSN® ensure Toro central control systems operate smoothly.

"We had another case, it was Labor Day weekend, when all of a sudden our hand-helds weren't working," recalls Collins. "We were able to work through Toro NSN, and basically we just had to change the port on the computer and then it worked fine. And that was on a Saturday morning, on a holiday."

Every Question Important

"Once you subscribe to NSN, you can pick that phone up at any time and call them, and you never have to feel uncomfortable or worry about being chastised because you don't know," adds Pavlasek. "They'll walk you right through the problem, and it's simple things sometimes. Maybe you just left the rain delay switch on and you couldn't water. You didn't look up in the corner to see that you forgot to switch it off. So you call them and they'll say, 'Well, did you check your rain delay?' And, oh look,

there it was. It could be that simple, and they'll take care of it and never make you feel bad about it."

"I had a pop-up come on once that I thought was strange, so I called them about it," says Collins. "They calmly said, 'Yeah, that'll happen. Just hit this button and it'll go away, and it shouldn't bother you anymore.' I don't feel like any problem is too small, and they certainly don't act like any problem is too small."

"It's just one less worry that superintendents have in their busy lives," says Dave Smith, Toro's Customer Support Manager. "NSN phone support is there to assist with the software and the central control system. And if it's a bigger issue that requires equipment to resolve, our A+ certified hardware technicians and next-day replacement service ensure minimal downtime."

That's exactly what happened to Superintendent Collins when an electrical surge damaged his system computer. "When the CPU was hit, that was the only time they couldn't solve the problem right there over the phone," he recalls. "But even that didn't take much longer. They were able to diagnose it, and when we quickly came to the conclusion that the CPU needed to be replaced, that was taken care of, and they replaced it. So I would say my record with NSN is 100%."

Personalized Support

NSN technicians can use your data to link right to your irrigation control system's computer to perform remote diagnostic checks and speed resolution of your operational issues.

"They'll also let you download your stuff onto a zip drive and send it to them," says Pavlasek. "Then if you have a problem, they can pull that disk, load it on the computer and walk you through your program. That's kind of unique. So if you're having technical problems, they can take your system and



Toro® NSN® specializes in keeping Toro irrigation systems running at optimal performance

look at it on their computer screen, with all your hydraulic tree and everything right there."

No other manufacturer in the irrigation industry offers a dedicated support staff the way Toro does with NSN. Toro NSN also hosts training events at regional locations nationwide, plus special sessions held on-site at NSN headquarters in Abilene, Texas. All NSN training classes qualify for GCSAA external continuing education units (CEUs). Toro NSN will be introducing new web-based training classes in early 2005. "Our Super Sessions will provide powerful instruction and hands-on learning via web technology, saving the expense of travel and time," explains Murphy Rhoads, NSN Training Manager. For more details, call 888.676.8676 or log on to www.toronsn.com.

"I would recommend Toro NSN to any golf course superintendent who's interested in putting a control system in," concludes Superintendent Walters. "The response they have delivered for me has just been phenomenal."

"You can't do without it," agrees Collins. "As you've probably figured out, I'm a big fan of these guys." ■